

**H.P.BOARD OF DEPARTMENTAL EXMINATION  
DEPATMENTAL EXAMINATION OF OTHER GAZETTED OFFICERS/  
OFFICIALS OF HIMACHAL PRADESH SESSION, MAY- JUNE, 2009**

**PAPER-3 (ECONOMICS AND STATISTICS DEPARTMENT)**

**Time Allowed: 3 Hours.**

**Maximum Marks: 100**

Q.No.1 a) What are the advantages of Median over measures of Central Tendency?

(ii) Find the Median of the prime numbers between 20 and 50.

b) Discuss the functions of the Department of Economics and Statistics, \ Himachal Pradesh in meeting the data requirements of the State.

Q.No.II a) A Card is drawn form a pack of 52 cards and then a second card is drawn.

What is the probability that both cards drawn are queen?

b) Illustrate the fact that NSSO has become synonymous with reliable estimates on various aspects of economic and social life in India.

Q.No.III a) Comment on the following:-

(i) Sampling is necessary under certain conditions.

(ii) Probability Sampling is different form Purposive Sampling.

b) The figures of antitoxin treatment in a city hospital, for a certain period, in the treatment of a disease were:-

	Cases	Deaths
Antitoxin	228	37
Ordinary treatment	337	28

Can it be concluded that there were significantly more deaths in the group treated By antitoxins?

Q.No.IV a) Elaborate the fact that population census in India is not a mere headcount.

b) A group of eight students got the following percentage of marks in test in statistics and Accountancy. Compute the Rank Correlation coefficient.

Roll Number	11	12	13	14	15	16	17	18
% Marks in Statistics	50	60	65	70	75	40	70	80
% marks in Accountancy	80	71	60	75	90	82	70	50

- Q.No.V a) What are the different types of errors in statistical survey? Mention factors Responsible for their occurrence.
- b) Two workers, A and B, on the same job show the following results over a long period of time.

	Worker-A	Worker-B
Mean time of completing the job in minutes	30	25
Standard Deviation	6	4

Which worker appears to be more consistent in the time he requires to The job and which workers appears to be faster in completing the job?

- Q.No.VI a) Discuss the merits and limitations of diagrammatic presentation of statistical Data.
- b) Bring out the empirical relation of Mean, Quartile and Standard Deviation in a Symmetrical distribution.

Q.No.VII a) interpolate the sales of retail store for 1994 from the following data:

Year	1992	1993	1994	1995	1996
Sale (Thousand Rs.)	200	240	?	350	400

- b) What is the purpose of livestock census and how it is conducted in India?

Q.No.VIII Write brief notes on any four of the following:-

- a) Normal Distribution
- b) Limitations of Statistics
- c) Approximation
- d) Ogive curve
- e) Null Hypothesis

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